PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gordon F. Grigor et. al.
Serial No: 09/032,863
Filing Date: 3/02/98
Title: METHOD AND APPARATUS FOR CONFIGURING MULTIPLE DISPLAYS ASSOCIATED WITH A COMPUTING SYSTEM

Examiner: Kevin Nguyen
Art Group: 2774
Docket No: ATI980044 (0100.01117)

Date: June 5, 2000

Box AF
Honorable Commissioner of
Patents and Trademarks,
Washington, D.C. 20231

RESPONSE TO FINAL OFFICE ACTION

In response to the Final Office Action mailed March 2, 2000 regarding the above patent application, the Applicants respectfully submit the following response.

AMENDMENT

Please cancel, without prejudice, claims 1-13, 15, 16, 20, 25, 26, 27, 28, 34, 35, 36 and 37.

14.   (Twice Amended) A video graphics processing circuit comprises:

a plurality of display controllers included on a single video graphics card;

a plurality of drivers;

memory, wherein at least a portion of the memory is screen memory, the screen memory having a plurality of screen memory portions, each of the plurality of screen memory potions storing separate display data;

coupling module operably coupled to the plurality of displays and the screen memory; and

a coupling controller operably coupled to receive display preferences and to determine whether the display preferences can be fulfilled in observance of configuration properties, wherein, when the display preferences can be fulfilled, the coupling controller

provides configuration requirements to the coupling module, wherein the coupling module, based on the configuration requirements, operably couples at least one of the plurality of display controllers with at least a portion of the screen memory and with at least one display, <u>a respective display driver of the plurality of display drivers thereby writing respective separate display data to a respective one of the plurality of screen memory portions,</u> and wherein the at least one of the plurality of display controllers retrieves display data from the at least a portion of the screen memory and provides the display data to the at least one display<u>, and wherein the coupling controller provides reconfiguration requirements to the coupling module when the display preferences cannot be fulfilled but a current configuration of the plurality of display controllers to the at least one display can be reconfigured such that the display preferences can be fulfilled while maintaining effective configuration of the current configuration</u>.

β1
concld

Sub
C2

β2
cont

24.   (Twice Amended) A video graphics processing circuit comprises:

a processing unit; and

memory operably coupled to the processing unit, wherein the memory stores programming instructions that, when executed by processing unit, cause a coupling controller of the processing unit to (a) receive display preferences regarding at least one of a multiple displays; (b) determine whether the display preferences can be fulfilled in observance of at least one of: configuration properties of the at least one of the multiple displays and configuration properties of a computing system<u>, the coupling controller determining whether a current configuration of the multiple displays to the computing system can be reconfigured such that the display preferences can be fulfilled while maintaining effective configuration of the current configuration when the display preferences cannot be fulfilled</u>; and (c) configure the computing system and the at least one of the multiple displays in accordance with the display preferences when the display preferences can be fulfilled<u>, and reconfigure operable coupling of the multiple displays to the computing system such that the at least one of the multiple displays is configured in accordance with the display preferences when the current configuration can be reconfigured</u>;

the memory storing further programming instructions: that cause the processing unit to operably couple a display controller of the computing system to the at least one of the multiple displays, the display controller providing display data to the at least one of the multiple displays;

that cause the processing unit to operably couple the display controller to at least one of a plurality of screen memories, each of the plurality of the screen memories storing separate display data and the display controller retrieving the display data form the at least one of the plurality of screen memories; and

that cause the processing unit to operably couple the display controller to at least one of a plurality of display drivers, each of the plurality of display drivers writing the separate display data to the plurality of screen memories.

33.   (Twice Amended) A digital storage medium for storing programming instructions that, when executed by a processing unit, cause the processing unit to configure multiple displays associated with a computing system, the digital storage medium comprises:

first means for storing programming instructions that cause a coupling controller of the processing unit to receive display preferences regarding at least one of the multiple displays;

second means for storing programming instructions that cause the coupling controller of the processing unit to determine whether the display preferences can be fulfilled in observance of at least one of: configuration properties of the at least one of the multiple displays and configuration properties of the computing system; [and]

third means for storing programming instructions that cause the coupling controller of the processing unit to configure the computing system and the at least one of the multiple displays in accordance with the display preferences when the display preferences can be fulfilled[.];

fourth means for storing programming instructions that cause the processing unit to:

determine whether a current configuration of the multiple displays to the computing system can be reconfigured such that the display preferences can be